Volume 8, Issue 1

Winter 2004/2005

National Weather Service - Elko The Great Basin Spotter Newsletter



Spotter Awards	1
New Web Page	1
IV-ROC	2
2004 Fire Season	3
Spring Creek Snow Fall	3
Seasonal Outlook	4
Winter Weather Alerts	4
New Faces	5
Concept of Drought	6

Frenchy Montero Receives NWS Holm & Stoll Awards



Frenchy Montero, Leonard Creek COOP, receiving Holm and Stoll Awards from Kevin Baker, MIC Elko.

Frenchy Montero of Leonard Creek Ranch was recently presented two prestigious Cooperative Weather Observing awards. In a ceremony at Winnemucca, Frenchy was first present the John Campanius Holm Award as one of the top 25 weather observers in the Nation. He also received the Edward H. Stoll Award, recognizing his 50 years of service as a weather observers. Mr. Montero began his long tenure back in 1954 when he volunteered to be the backup weather observer. In 1980 he became the primary weather ob-

server. He is grooming his son Leonard to become the next cooperative weather observer, passing on a long and proud family tradition. Thanks Frenchy for 50 years of great work and here's to the next 50!



Meteorologist-in-Charge says: Check Out Our *New* NWS Web Page! By Kevin Baker

Many changes have been made to our web page over the past several months, so please check them out. The Forecast at a Glance is a quick forecast for the cities around the area over the next seven days. If you have comments or suggestions for improvement of the web page, feel free to complete the web page survey. We plan on making some additions and improvements over the next several months.

I wish to thank all of our cooperative weather observers and weather spotters for their volunteerism spirit. Your weather observations and information helps us verify storms and supply the Nation with climate data. Thank you all!

National Weather Service, Elko

National Weather Service Elko Page 2

IV-ROCS the Coop World by Randy Settje

WHAT IS IV-ROCS?

Sounds like something out of MTV or a hospital. IV what? ROCS what? Actually it is the newest replacement for the ROSA phone reporting system. Interactive Voice Remote Observation Collection System (IV-ROCS) is a phone-in access system requiring a touch-tone telephone. Those Coop Observers who do not have a computer or on-line access should try to use the new IV-ROCS phone system. It is somewhat slower than the web-based system, but not difficult to get used to. IV-ROCS resembles many phone-in systems now in use by most companies and businesses throughout the world. If interested, please contact us via our toll free number. We will give you all the information you need on getting started. Please read below for additional information. We will be waiting to here from you!

IV-ROCS

Interactive Voice - Remote Observation Collection System

A new Cooperative Program data acquisition system, (IV-ROCS), is now available for use. You simply dial a designated phone number, and IV-ROCS voice will direct you through the data entry process. IV-ROCS will be used as the replacement for the ROSA reporting system that is being used by some observers. If you are a NWS cooperative observer using a ROSA telephone, you may start using IV-ROCS at any time. NWS representatives will demonstrate the IV-ROCS voice system to observers during this fall and winter as we make our station visits.

Call IV-ROCS

- Select Language (1 English, 2– Spanish)
- Identify location (you six digit station number)
- Observation time
- Current, maximum and minimum temperatures
- Precipitation amount
- Precipitation type during 24 hr period
- 24 hours snowfall
- Current snow depth





NOTES:	Precip Types
	1 - Rain
Do NOT use decimals	2 - Freezing Rain
Precipitation amount is entered in 0.01 inch increments	3 - Drizzle
(0.01 is entered as 01 and 0.47 as 47)	4 - Freezing Drizzle
Snowfall entered in 0.1 increments (0.1 as 1)	5 - Snow
Snow depth is entered in whole inches	6 - Snow Pellets
Trace is always entered as *	7 - Snow Grains
Negative numbers are preceded by *	8 - Ice Pellets
	9 - Hail

Review of 2004 Fire Weather Season across Northern and Central Nevada by Brian Fehrn



It was a fairly quiet fire weather season across Northern and Central Nevada in 2004. The Fire Weather season kicked off in mid May as fuels began to dry out across Humboldt and Northern Nye Counties. The Elko Forecast Office began issuing Fire Weather Forecasts at that time and continued issuing forecast through the first part of October before a cold front brought the first taste of snow and cold temperatures to parts of the Great Basin. There were a few fires across the region with the largest being the Chrome fire in the southern part of the Ruby Mountains in early July. It was brought under control in just a few days. Winds and low relative humidities proved to have the greatest impact on the 2004 Fire Weather season with 20 days of sustained winds over 30 mph with humidities below 15 percent.

The office issued over 110 specific spot forecast for wildfires, prescribed burns, plus aiding law enforcement across the region from March through November. This included search and rescue efforts plus proving forecasts for the cleanup of the train derailment in Elko in early November. We will continue to provide spot forecasts as necessary throughout the winter before recommencing next spring. Happy Holidays!

Pictures of November Snow in Spring Creek by Steve Apfel

A nice snowfall on Saturday, November 27 and Sunday November 28 dumped around 7 inches on parts of Spring Creek. Elko received about 6 inches. These pictures were taken by Steve Apfel near the Horse Palace area in Spring Creek. The snowfall was followed by much colder temperatures. The Low temperatures on the 29th and 30th at Elko were –2 and –6 degrees respectively. The "cold snap" lasted through December 7th with single digit lows each night. The seasonal outlook for January through March of 2005 is on page 4 of this newsletter.

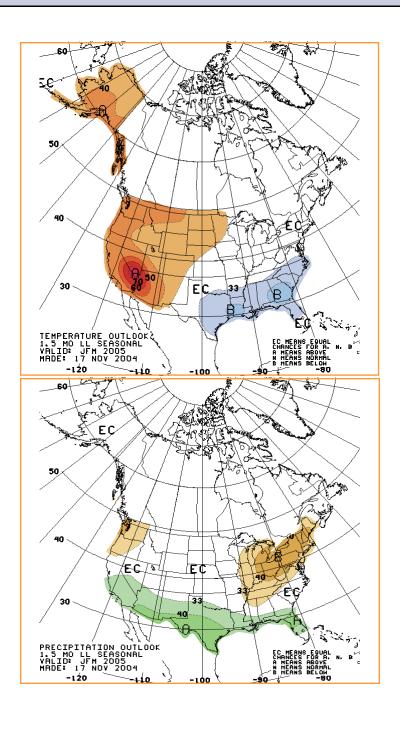




Seasonal Outlooks

OFFICIAL Forecasts

Jan-Feb-Mar 2005



Meet the New Faces at our Weather Office



Jeff with his children Monica, Jeffrey & Maddie

Jeff Savadel: Warning Coordination Meteorologist (WCM). Jeff and his family recently transferred to the Elko Forecast Office from National Weather Service Headquarters in Washington DC. He came here as a Senior Forecaster but was quickly promoted to the WCM position. What is a WCM? The WCM is the primary liaison between the forecast office and the public. In a way, he is a customer service representative for National Weather Service. Jeff's hometown is Moorestown, NJ. However he has lived in Washington DC; Marquette, Michigan; Columbia Missouri; Fredericksburg, Virginia; and now Elko. He graduated high school in Moorestown, NJ, then received his BA at Rutgers University and his master's degree at University of Missouri. Jeff has been interested in weather ever since he was 4 years old. His hobbies include home brewing, hiking and civil war history. When he relaxes at home he enjoys listening to classic rock and punk music. Jeff has been married to Kathy for 10 years. The have three children: Monica (7), Maddie (6) and Jeffrey (3).

Ian Morrison: *Meteorologist*. Ian grew up on the northern coast of Massachusetts in a town called Salisbury. He went to college at the University of Massachusetts at Amherst earning a degree in Mechanical engineering. He worked for Fila Footwear doing biomechanical and material research for over a year before deciding the shoe business was not for him. Ian then made a life changing decision: he would go to graduate school. His two choices were Wisconsin and the University of Hawaii. Ian say it took him less than a nanosecond to choose Hawaii. He spent the next 7 years in Hawaii surfing, spear fishing hiking and meeting lots of people who are now his good friends. He also received his Master's Degree in Meteorology and then went on to pursue a Doctorate Degree. About half way through the PhD program he decided he had had enough of graduate school and it was time to get a real job. He applied for many National Weather Service jobs across the Nation for many months before receiving a job offer from the Elko Forecast Office. He moved her in last February and has been acclimating to the climate, friendly people, and the lack of an ocean ever since.

Roham Abtahi: *Hydrometeorological Technician (HMT)*. Ro grew up in the Washington DC area. He went to high school in Vienna, Virginia and college in Missoula, MT where he received a degree in Fire Science. Ro first got interested in weather when he took an Introductory Meteorology Course and had a great and inspiring professor. When not working at the weather office, Ro enjoys hiking and climbing, playing the drums and traveling. His most favorite thing to do is to back country ski. Ro and his wife live in Spring Creek and really like it out there. Most of his family lives in the DC area, some in Toronto, and some in Iran. He has one brother who is 31 years old.

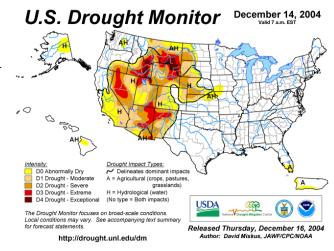
Tim Trudel: *Meteorologist*. Tim's home town is back East in Attleboro, Massachusetts. He has also lived in Sherbrook, Quebec and Laramie, Wyoming. He graduated from Woonsocket High School, Lyndon State College, and received his Master's degree from University of Wyoming. He has been interested in weather ever since he was 5 years old. In college his nickname was Timmahhh (from the show South Park) and also Strudel. His hobbies include hiking, sports, and computer gaming. His favorite music is hard rock and hip hop and his favorite bands include Metallica, Van Halen, Duran Duran, Godsack, Offspring, Nirvana, Korn, JayZ, Nelly and Eminem. On his days off he likes to sleep, hike, take road trips and hang with his friends.

The Concept of Drought

By Larry Whitworth

The Elko area remains in a moderate hydrological drought classification despite receiving well above normal amounts of precipitation in August (333%) and September (194%). The Elko airport received 103% of normal precipitation for Water Year 2004 (Oct 2003-Sep 2004) and quantified 276% of normal in October 2004, the first month of the current Water Year. Since there are different types of drought, many factors other than monthly, or even annual precipitation, need to be considered when determining drought classification.

Drought is a normal, recurrent feature of climate that occurs virtually everywhere and is a temporary aberration. Although it has scores of definitions, it originates from a deficiency of precipita-



tion over an extended period of time, usually a season or more. This deficiency results in a water shortage for some activity, group, or environmental sector. Among others, droughts can be meteorological, hydrological, agricultural and socioeconomic.

Meteorological Drought: Meteorological drought is defined usually on the basis of the degree of dryness (in comparison to some "normal" or average amount) and the duration of the dry period. Definitions of meteorological drought can be highly variable from region.

Hydrological Drought: Hydrological drought is associated with the effects of periods of precipitation (including snowfall) shortfalls on surface or subsurface water supply (i.e., streamflow, reservoir and lake levels, ground water). All droughts originate with a deficiency of precipitation and hydrologists are more concerned with how this deficiency plays out through the hydrologic system. Hydrological droughts may or may not be in phase with a meteorological or agricultural drought since it takes longer for precipitation deficiencies to show up in components of the hydrological system such as soil moisture, streamflow, and ground water and reservoir levels.

Agricultural Drought: A good definition of agricultural drought should be able to account for the variable susceptibility of crops during different stages of crop development, from emergence to maturity. Agricultural drought links various characteristics of meteorological (or hydrological) drought to agricultural impacts, focusing on such conditions as precipitation shortages, differences between actual and potential evapotranspiration, soil water deficits and reduced ground water or reservoir levels. When drought begins, the agricultural sector is usually the first to be affected because of its heavy dependence on stored soil water.

Socioeconomic Drought: This definition of drought associates the supply and demand of some economic good with elements of meteorological, hydrological, and agricultural drought. Its occurrence depends on the time and space processes of supply and demand to identify or classify droughts.

Why is Elko still considered in a hydrological drought classification after receiving above-normal precipitation for the last three months? When precipitation returns to normal and meteorological drought conditions have abated, the sequence is repeated for the recovery of surface and subsurface water supplies. Soil water reserves are replenished first, followed by streamflow, reservoirs and lakes, and ground water. Drought impacts may diminish rapidly in the agricultural sector because of its reliance on soil water, but linger for months or even years in other sectors dependent on stored surface or subsurface supplies. Ground water users, often the last to be affected by drought during its onset, may be last to experience a return to normal water levels. The length of the recovery period is a function of the intensity of the drought, its duration, and the quantity of precipitation received as the episode terminates.

Why is Elko still considered in a hydrological drought classification after receiving above-normal precipitation for the last three months? When precipitation returns to normal and meteorological drought conditions have abated, the sequence is repeated for the recovery of surface and subsurface water supplies. Soil water reserves are replenished first, followed by streamflow, reservoirs and lakes, and ground water. Drought impacts may diminish rapidly in the agricultural sector because of its reliance on soil water, but linger for months or even years in other sectors dependent on stored surface or subsurface supplies. Ground water users, often the last to be affected by drought during its onset, may be last to experience a return to normal water levels. The length of the recovery period is a function of the intensity of the drought, its duration, and the quantity of precipitation received as the episode terminates.

Ruby Mountain Hot Air Balloon Fest by Randy Settje Meteorologist

On September 24th through 26th, the Elko Chamber of Commerce sponsored a gathering of hot air balloon enthusiasts, known as the **Ruby Mountain Hot Air Balloon Fest.** This event was very successful with about 25 to 30 pilots, and several hundred crew members and spectators participating in the activities throughout the weekend. The weather conditions were great for the balloon flights with clear skies, cool mornings and light winds.

Meteorologists Brian Fehrn and Gerry Claycomb from the Elko Forecast Office provided weather briefings each morning the balloonists.





Balloons preparing to take off in Spring Creek (left), and (right) a balloon heating the air during ascent.

National Weather Service 3720 Paradise Dr. Elko, NV 89801



Mail to:

Articles contributed by NWS Elko staff Editor: Randy Settje